

US EPA RECORDS CENTER REGION 5



486317

**COST PROJECTION REPORT
FOR
CONTINENTAL CHEMISTE
CHICAGO, COOK COUNTY, ILLINOIS
TDD: T05-9310-014
PAN: EIL0784VAA**

Prepared for

**Emergency & Enforcement Response Branch
United States Environmental Protection Agency
Region V**

NOVEMBER 8, 1993

Prepared by

**Technical Assistance Team
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Chicago, Illinois**

REMOVAL COST MANAGEMENT SYSTEM

COST PROJECTION

FOR

CONTINENTAL CHEMISTE CORPORATION

The presence of lindane contaminated soil and wooden floor at Continental Chemiste Corporation (CCC) site need to be addressed to abate threats due to lindane's hazardous nature. Two options were explored for a removal action at CCC site. They are as follows:

1) Removal of contaminated wooden floor and the soil, decontaminating the building, replacing the wooden floor as needed and painting the floor and the walls with a sealant like epoxy paint. All the contaminated material will be landfilled. For this option removal costs were projected for

A) The removal of 80 cubic yards of contaminated soil and 10 to 15 cubic yards of contaminated wooden floor of the building, i.e., for 45' wide and 95' length dimensions

B) 45 cubic yards of contaminated soil and wood, i.e., half the building floor, assuming contamination may not be prevalent in half the building area.

C) 30 cubic yards of contaminated soil and wood, i.e., one third (1/3) of the building area, assuming contamination may not be prevalent in two thirds (2/3) of the building area.

2) Removal of about 10 to 15 cubic yards of wooden floor, laying a 3 inch concrete on the concrete floor, replacement of wooden floor and painting the floor and walls with a water proof sealant like epoxy paint. The contaminated wooden floor will have to be landfilled.

Landfill costs are estimated at \$ 300 per cubic yard and transportation costs are estimated at \$ 4 per mile. Projected removal costs are as follows:

Option 1

A) \$ 113,259.13

B) \$ 71,595.43

C) \$ 54,535.30

Option 2

\$ 103,354.00

Cost projections for CCC site were made using Removal Cost Management System (RCMS) model.

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Summary Report
Initial Cost Projection Scenario: CONCRETE WORK COST

Page: 1

Projection ID Number: IN-SITU
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

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Cost Projection Summary
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Contractor Personnel	20,044.87
Contractor Equipment	11,052.72
Unit Rate Materials	1,680.36
At Cost Materials	3,190.00
Subcontractors	28,371.75
Waste Transportation	2,299.00
Waste Disposal	8,255.50

Cleanup Contractor Subtotal	74,894.20
Federal and State Agencies	0.00

Extramural Subtotal	74,894.20
20 % Extramural Contingency	14,978.84

Extramural Subtotal	89,873.04
TAT Personnel	0.00
TAT Special Projects	0.00
TAT Analytical Services	0.00

Total TAT Costs	0.00
Other Cost Items	0.00

Extramural Subtotal	89,873.04
15 % Project Contingency	13,480.96

Total Extramural Cost	103,354.00
EPA Regional Personnel	0.00
EPA Non-Regional Personnel	0.00
EPA Headquarters Direct	0.00
(10 % of Regional Hours)	
EPA Indirect	0.00

EPA Total	0.00

Project Total	103,354.00

Initial Cost Projection Scenario: CONCRETE WORK COST

Projection ID Number: IN-SITU

Date: 10/20/93

Cleanup Contractor: RESS - Riedel Environmental

TAT Contractor: NO TAT COSTS

Project Scope

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Number	Step/Milestone	Estimated Duration	Cost
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000	GENERAL SITE COSTS	7 Days	103,354.00

			103,354.00

Detailed Report By Category
Initial Cost Projection Scenario: CONCRETE WORK COST

Projection ID Number: IN-SITU

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Cost Projection Detail - By Category

Contractor Personnel

Job Category	Number of Employees	Number of Days	Hrs per Day	Labor	PD, Lodge Travel	Total Charge

000 - GENERAL SITE COSTS						
S105-Response Manager	1	7	12.00	4,046.28	1,143.23	5,189.51
S205-Equipment Operato	1	7	12.00	3,221.96	1,143.23	4,365.19
S210-Field Clerk/Typis	1	7	12.00	2,184.56	1,143.23	3,327.79
S215-Laborer	2	7	12.00	4,875.92	2,286.46	7,162.38
Total for GENERAL SITE COSTS :						20,044.87

Total personnel cost:						20,044.87

Contractor Equipment

Equipment Name	Number Needed	Reg Days	Hours /day	Stby Days	Mob/Demob Days	Decon Days	Mileage	Total Charge

000 - GENERAL SITE COSTS								
10910-Car-Passenger	1	7	12.00	0	0	0	N/A	340.30
15430-Van-Passenger	1	7	12.00	0	0	0	N/A	382.57
22020-Decon-8x25	1	7	12.00	0	2	0	N/A	252.29
25540-Office-8x40	1	7	12.00	0	2	0	N/A	859.66
36070-Loader/Wheel-CAT 966	1	7	12.00	0	2	1	N/A	5,658.97
75140-Generator-50 KW	1	7	12.00	0	0	0	N/A	882.29
76710-Lighting-Conventiona	1	7	12.00	0	0	0	N/A	235.44
78510-Scales-	1	2	12.00	0	2	0	N/A	50.45
79611-Water Laser-HI-Press	1	2	12.00	0	2	0	N/A	2,390.75
Total for GENERAL SITE COSTS :								11,052.72

Total equipment cost:								11,052.72

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge

000 - GENERAL SITE COSTS				
EPOXY PAINT	SEALANT	6.000	100.0 GAL	627.00
GMC-H CARTRIDGES	BREATHING PROT	33.600	30.0 BOX	1,053.36
Total for GENERAL SITE COSTS :				1,680.36

Detailed Report By Category (cont.)
 Initial Cost Projection Scenario: CONCRETE WORK COST

Projection ID Number: IN-SITU
 Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
 TAT Contractor: NO TAT COSTS

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge

Total unit rate materials cost:				1,680.36

At Cost Materials

Material Name	Material Use	Quantity/Amount	Total Charge

000 - GENERAL SITE COSTS			

PPE	PERSONAL PROT	SET	1,100.00
SAMPLE BOTTLES	SOIL SAMPLING	BOX	1,045.00
SITE SUPPLIES	ADMIN/H&S	LOT	1,045.00
Total for GENERAL SITE COSTS :			----- 3,190.00
Total at cost materials cost:			----- 3,190.00

Subcontractors

Subcontractor	Service	Billing	Total Charge

000 - GENERAL SITE COSTS			

MICHIGAN ELECTRIC	ELECTRIC SERVICE	1.0 ONCE	261.25
PORT-O-LETS INC	PORT BATHROOM REN	1.0 ONCES	52.25
HICH BELL	PHONE HOOK-UP	1.0 LOT	313.50
OFFICE MACHINE RENTAL	COMPUTER/PRINT RT	1.0 ONCE	313.50
OFFICE MACHINE RENTAL	FAX AND COPIER	1.0 ONCE	313.50
LOCAL WATER COMPANY	WATER FOR DECON	1.0 ONCE	104.50
CITY DUMP	GARBAGE DISPOSAL	2.0 ROLL-OFF	209.00
GAS-R-US	FUEL FOR VECHILES	1.0 ONCE	261.25
LAB LOCAL ONE	ANALYTICAL	1.0 ONCE	1,045.00
CULIGAN MAN	DRINKING WATER	1.0 ONCE	104.50
MICHIGAN BELL	PHONE SERVICE	1.0 ONCE	313.50
SUPPLY/SELL ALL	REPLACEMENT WOOD	1.0 ONCE	10,450.00
CONCRETE CONTRACTOR	CONCRETE LAYOUT	1.0 ONCE	14,630.00
Total for GENERAL SITE COSTS :			----- 28,371.75
Total subcontractor cost:			----- 28,371.75

Detailed Report By Category (cont.)
 Initial Cost Projection Scenario: CONCRETE WORK COST

Projection ID Number: IN-SITU
 Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
 TAT Contractor: NO TAT COSTS

Waste Transportation

Waste Type	Amount	Loads	Cost Per Mile	Miles	Total Charge

000 - GENERAL SITE COSTS					

CONT WOOD	15 CU YDS	1	4.00	50	209.00
CONT. WATER	1000 GAL	2	4.00	175	1,463.00
NON-HAZ	40 CU YD	2	4.00	50	418.00
PPE/METAL DEBRI	20 CU YDS	1	4.00	50	209.00

Total for GENERAL SITE COSTS :					2,299.00

Total transportation cost:					2,299.00

Waste Disposal

Waste Type	Disposal Method	Units	No. of Units	Unit Cost	Total Charge

000 - GENERAL SITE COSTS					

CONT WOOD	LAND FILL	CU YDS	15	300.00	4,702.50
DECON WATER	OFF-SITE	GAL	500	4.00	2,090.00
NON-HAZ DEBRIS	OFF-SITE	CU.YDS	40	10.00	418.00
PPE/METAL DEBRI	LANDFILL	CUYDS	20	50.00	1,045.00

Total for GENERAL SITE COSTS :					8,255.50

Total disposal cost:					8,255.50

Federal and State Agencies

0.00

20 % Extramural Contingency: 14,978.84

TAT Personnel

Level	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge

000 - GENERAL SITE COSTS						

PL2	0	0.00	35.00	0.00	0.00	0.00

TAT Special Projects

0.00

TAT Analytical Services

0.00

Detailed Report By Category (cont.)
 Initial Cost Projection Scenario: CONCRETE WORK COST

Projection ID Number: IN-SITU

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Other Costs 0.00

15 % Project Contingency: 13,480.96

EPA Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge, Travel	Total Charge
000 - GENERAL SITE COSTS						
NO EPA COSTS	0	0.00	30.00	0.00	0.00	0.00

EPA Non-Regional Personnel 0.00

Total site cost: 103,354.00

Detailed Report By Task Code
Initial Cost Projection Scenario: CONCRETE WORK COST

Projection ID Number: IN-SITU
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

Cost Projection Detail - By Task Code

000 - GENERAL SITE COSTS

Contractor Personnel

Job Category	Number of Employees	Number of Days	Hrs per Day	Labor	PD, Lodge Travel	Total Charge
S105-Response Manager	1	7	12.00	4,046.28	1,143.23	5,189.51
S205-Equipment Operato	1	7	12.00	3,221.96	1,143.23	4,365.19
S210-Field Clerk/Typis	1	7	12.00	2,184.56	1,143.23	3,327.79
S215-Laborer	2	7	12.00	4,875.92	2,286.46	7,162.38
Total for GENERAL SITE COSTS :						20,044.87

Contractor Equipment

Equipment Name	Number Needed	Reg Days	Hours /day	Stby Days	Mob/Demob Days	Decon Days	Mileage	Total Charge
10910-Car-Passenger	1	7	12.00	0	0	0	N/A	340.30
15430-Van-Passenger	1	7	12.00	0	0	0	N/A	382.57
22020-Decon-8x25	1	7	12.00	0	2	0	N/A	252.29
25540-Office-8x40	1	7	12.00	0	2	0	N/A	859.66
36070-Loader/Wheel-CAT 966	1	7	12.00	0	2	1	N/A	5,658.97
75140-Generator-50 KW	1	7	12.00	0	0	0	N/A	882.29
76710-Lighting-Conventiona	1	7	12.00	0	0	0	N/A	235.44
78510-Scales-	1	2	12.00	0	2	0	N/A	50.45
79611-Water Laser-HI-Press	1	2	12.00	0	2	0	N/A	2,390.75
Total for GENERAL SITE COSTS :								11,052.72

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge
EPOXY PAINT	SEALANT	6.000	100.0 GAL	627.00
GMC-H CARTRIDGES	BREATHING PROT	33.600	30.0 BOX	1,053.36
Total for GENERAL SITE COSTS :				1,680.36

At Cost Materials

Material Name	Material Use	Quantity/Amount	Total Charge
PPE	PERSONAL PROT	SET	1,100.00
SAMPLE BOTTLES	SOIL SAMPLING	BOX	1,045.00
SITE SUPPLIES	ADMIN/H&S	LOT	1,045.00
Total for GENERAL SITE COSTS :			3,190.00

Detailed Report By Task Code (cont.)
 Initial Cost Projection Scenario: CONCRETE WORK COST

Projection ID Number: IN-SITU
 Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
 TAT Contractor: NO TAT COSTS

Subcontractors

Subcontractor	Service	Billing	Total Charge
MICHIGAN ELECTRIC	ELECTRIC SERVICE	1.0 ONCE	261.25
PORT-O-LETS INC	PORT BATHROOM REN	1.0 ONCES	52.25
MICH BELL	PHONE HOOK-UP	1.0 LOT	313.50
OFFICE MACHINE RENTAL	COMPUTER/PRINT RT	1.0 ONCE	313.50
OFFICE MACHINE RENTAL	FAX AND COPIER	1.0 ONCE	313.50
LOCAL WATER COMPANY	WATER FOR DECON	1.0 ONCE	104.50
CITY DUMP	GARBAGE DISPOSAL	2.0 ROLL-OFF	209.00
GAS-R-US	FUEL FOR VECHILES	1.0 ONCE	261.25
LAB LOCAL ONE	ANALYTICAL	1.0 ONCE	1,045.00
CULIGAN MAN	DRINKING WATER	1.0 ONCE	104.50
MICHIGAN BELL	PHONE SERVICE	1.0 ONCE	313.50
SUPPLY/SELL ALL	REPLACEMENT WOOD	1.0 ONCE	10,450.00
CONCRETE CONTRACTOR	CONCRETE LAYOUT	1.0 ONCE	14,630.00
Total for GENERAL SITE COSTS :			28,371.75

Waste Transportation

Waste Type	Amount	Loads	Cost Per Mile	Miles	Total Charge
CONT WOOD	15 CU YDS	1	4.00	50	209.00
CONT. WATER	1000 GAL	2	4.00	175	1,463.00
NON-HAZ	40 CU YD	2	4.00	50	418.00
PPE/METAL DEBRI	20 CU YDS	1	4.00	50	209.00
Total for GENERAL SITE COSTS :					2,299.00

Waste Disposal

Waste Type	Disposal Method	Units	No. of Units	Unit Cost	Total Charge
CONT WOOD	LAND FILL	CU YDS	15	300.00	4,702.50
DECON WATER	OFF-SITE	GAL	500	4.00	2,090.00
NON-HAZ DEBRIS	OFF-SITE	CU.YDS	40	10.00	418.00
PPE/METAL DEBRI	LANDFILL	CUYDS	20	50.00	1,045.00
Total for GENERAL SITE COSTS :					8,255.50

Federal and State Agencies

0.00

Detailed Report By Task Code (cont.)
 Initial Cost Projection Scenario: CONCRETE WORK COST

Projection ID Number: IN-SITU
 Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
 TAT Contractor: NO TAT COSTS

20 % Extramural Contingency: 14,978.84

TAT Personnel

Level	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
PL2	0	0.00	35.00	0.00	0.00	0.00

TAT Special Projects 0.00

TAT Analytical Services 0.00

Other Costs 0.00

15 % Project Contingency: 13,480.96

EPA Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
NO EPA COSTS	0	0.00	30.00	0.00	0.00	0.00

EPA Non-Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
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Total category cost: 103,354.00

Total site cost: 103,354.00

Summary Report

Initial Cost Projection Scenario: OFF-SITE DISPOSAL

Projection ID Number: CONT.CHE

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Cost Projection Summary

Contractor Personnel	33,989.42
Contractor Equipment	23,883.40
Unit Rate Materials	2,382.60
At Cost Materials	5,650.26
Subcontractors	14,473.25
Waste Transportation	3,344.00
Waste Disposal	24,453.00

Cleanup Contractor Subtotal	108,175.93
Federal and State Agencies	0.00

Extramural Subtotal	108,175.93
0 % Extramural Contingency	0.00

Extramural Subtotal	108,175.93
TAT Personnel	0.00
TAT Special Projects	0.00
TAT Analytical Services	0.00

Total TAT Costs	0.00
Other Cost Items	0.00

Extramural Subtotal	108,175.93
0 % Project Contingency	0.00

Total Extramural Cost	108,175.93
EPA Regional Personnel	0.00
EPA Non-Regional Personnel	0.00
EPA Headquarters Direct	763.20
(10 % of Regional Hours)	
EPA Indirect	4,320.00

EPA Total	5,083.20

Project Total	113,259.13

Summary Report (cont.)

Initial Cost Projection Scenario: OFF-SITE DISPOSAL

Projection ID Number: CONT.CHE

Date: 10/20/93

Cleanup Contractor: RESS - Riedel Environmental

TAT Contractor: NO TAT COSTS

Project Scope

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Number	Step/Milestone	Estimated Duration	Cost
000	GENERAL SITE COSTS	12 Days	113,259.13
999	ARCHIVE COSTS	12 Days	0.00

			113,259.13

Detailed Report By Category
Initial Cost Projection Scenario: OFF-SITE DISPOSAL

Projection ID Number: CONT.CHE
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

Cost Projection Detail - By Category

Contractor Personnel

Job Category	Number of Employees	Number of Days	Hrs per Day	Labor	PD, Lodge Travel	Total Charge
000 - GENERAL SITE COSTS						
S105-Response Manager	1	12	12.00	6,936.48	1,885.18	8,821.66
S205-Equipment Operato	1	12	12.00	5,523.36	1,885.18	7,408.54
S210-Field Clerk/Typis	1	12	12.00	3,744.96	1,885.18	5,630.14
S215-Laborer	2	12	12.00	8,358.72	3,770.36	12,129.08
Total for GENERAL SITE COSTS :						33,989.42
Total personnel cost:						33,989.42

Contractor Equipment

Equipment Name	Number Needed	Reg Days	Hours /day	Stby Days	Mob/Demob Days	Decon Days	Mileage	Total Charge
000 - GENERAL SITE COSTS								
10910-Car-Passenger	1	12	12.00	0	0	0	N/A	680.61
15430-Van-Passenger	1	12	12.00	0	0	0	N/A	765.15
22020-Decon-8x25	1	12	12.00	0	2	0	N/A	360.42
25540-Office-8x40	1	12	12.00	0	2	0	N/A	1,228.08
36070-Loader/Wheel-CAT 966	2	12	12.00	0	2	1	N/A	15,562.16
75140-Generator-50 KW	1	12	12.00	0	0	0	N/A	1,764.59
76710-Lighting-Conventiona	1	12	12.00	0	0	0	N/A	470.88
78510-Scales-	1	4	12.00	0	2	0	N/A	63.07
79611-Water Laser-HI-Press	1	4	12.00	0	2	0	N/A	2,988.44
Total for GENERAL SITE COSTS :								23,883.40
Total equipment cost:								23,883.40

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge
000 - GENERAL SITE COSTS				
EPOXY PAINT	SEALANT	6.000	100.0 GAL	627.00
GMC-H CARTRIDGES	BREATHING PROT	33.600	50.0 BOX	1,755.60
Total for GENERAL SITE COSTS :				2,382.60

Detailed Report By Category (cont.)
Initial Cost Projection Scenario: OFF-SITE DISPOSAL

Projection ID Number: CONT.CHE
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge

Total unit rate materials cost:				2,382.60

At Cost Materials

Material Name	Material Use	Quantity/Amount	Total Charge

000 - GENERAL SITE COSTS			

PPE	PERSONAL PROT	SET	1,650.00
SAMPLE BOTTLES	SOIL SAMPLING	BOX	1,910.26
SITE SUPPLIES	ADMIN/H&S	LOT	2,090.00

Total for GENERAL SITE COSTS :			5,650.26

Total at cost materials cost:			5,650.26

Subcontractors

Subcontractor	Service	Billing	Total Charge

000 - GENERAL SITE COSTS			

MICHIGAN ELECTRIC	ELECTRIC SERVICE	1.0 ONCE	261.25
PORT-O-LETS INC	PORT BATHROOM REN	1.0 MONTHS	104.50
MICH BELL	PHONE HOOK-UP	1.0 LOT	313.50
OFFICE MACHINE RENTAL	COMPUTER/PRINT RT	1.0 ONCE	522.50
OFFICE MACHINE RENTAL	FAX AND COPIER	1.0 ONCE	313.50
LOCAL WATER COMPANY	WATER FOR DECON	1.0 ONCE	104.50
CITY DUMP	GARBAGE DISPOSAL	2.0 ROLL-OFF	209.00
GAS-R-US	FUEL FOR VECHILES	1.0 ONCE	522.50
LAB LOCAL ONE	ANALYTICAL	1.0 ONCE	1,045.00
CULIGAN MAN	DRINKING WATER	1.0 ONCE	104.50
MICHIGAN BELL	PHONE SERVICE	1.0 MONTH	522.50
SUPPLY/SELL ALL	REPLACEMENT WOOD	1.0 ONCE	10,450.00

Total for GENERAL SITE COSTS :			14,473.25

Total subcontractor cost:			14,473.25

Detailed Report By Category (cont.)
Initial Cost Projection Scenario: OFF-SITE DISPOSAL

Projection ID Number: CONT.CHE
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

Waste Transportation

Waste Type	Amount	Loads	Cost Per Mile	Miles	Total Charge

000 - GENERAL SITE COSTS					

CONT. WATER	1000 GAL	2	4.00	175	1,463.00
LIN SOIL + WOOD	90 CU YDS	6	4.00	50	1,254.00
NON-HAZ	40 CU YD	2	4.00	50	418.00
PPE/METAL DEBRI	20 CU YDS	1	4.00	50	209.00

Total for GENERAL SITE COSTS :					3,344.00

Total transportation cost:					3,344.00

Waste Disposal

Waste Type	Disposal Method	Units	No. of Units	Unit Cost	Total Charge

000 - GENERAL SITE COSTS					

DECON WATER	OFF-SITE	GAL	1000	4.00	4,180.00
LIN SOIL + WOOD	LAND FILL	CU YDS	90	200.00	18,110.00
NON-HAZ DEBRIS	OFF-SITE	CU.YDS	40	10.00	418.00
PPE/METAL DEBRI	LANDFILL	CUYDS	20	50.00	1,045.00

Total for GENERAL SITE COSTS :					24,453.00

Total disposal cost:					24,453.00

Federal and State Agencies

0.00

0 % Extramural Contingency:

0.00

TAT Personnel

Level	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge

000 - GENERAL SITE COSTS						

PL2	0	0.00	35.00	0.00	0.00	0.00

TAT Special Projects

0.00

TAT Analytical Services

0.00

Detailed Report By Category (cont.)
 Initial Cost Projection Scenario: OFF-SITE DISPOSAL

Projection ID Number: CONT.CHE

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Other Costs 0.00

0 % Project Contingency: 0.00

EPA Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
000 - GENERAL SITE COSTS						
NO EPA COSTS	12	12.00	30.00	4,320.00	0.00	0.00

EPA Non-Regional Personnel

0.00

Total site cost: 108,175.93

Detailed Report By Task Code
Initial Cost Projection Scenario: OFF-SITE DISPOSAL

Projection ID Number: CONT.CHE
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

Cost Projection Detail - By Task Code

000 - GENERAL SITE COSTS

Contractor Personnel

Job Category	Number of Employees	Number of Days	Hrs per Day	Labor	PD, Lodge Travel	Total Charge
S105-Response Manager	1	12	12.00	6,936.48	1,885.18	8,821.66
S205-Equipment Operato	1	12	12.00	5,523.36	1,885.18	7,408.54
S210-Field Clerk/Typis	1	12	12.00	3,744.96	1,885.18	5,630.14
S215-Laborer	2	12	12.00	8,358.72	3,770.36	12,129.08
Total for GENERAL SITE COSTS :						33,989.42

Contractor Equipment

Equipment Name	Number Needed	Reg Days	Hours /day	Stby Days	Mob/Demob Days	Decon Days	Mileage	Total Charge
10910-Car-Passenger	1	12	12.00	0	0	0	N/A	680.61
15430-Van-Passenger	1	12	12.00	0	0	0	N/A	765.15
22020-Decon-8x25	1	12	12.00	0	2	0	N/A	360.42
25540-Office-8x40	1	12	12.00	0	2	0	N/A	1,228.08
36070-Loader/Wheel-CAT 966	2	12	12.00	0	2	1	N/A	15,562.16
75140-Generator-50 KW	1	12	12.00	0	0	0	N/A	1,764.59
76710-Lighting-Conventiona	1	12	12.00	0	0	0	N/A	470.88
78510-Scales-	1	4	12.00	0	2	0	N/A	63.07
79611-Water Laser-HI-Press	1	4	12.00	0	2	0	N/A	2,988.44
Total for GENERAL SITE COSTS :								23,883.40

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge
EPOXY PAINT	SEALANT	6.000	100.0 GAL	627.00
GMC-H CARTRIDGES	BREATHING PROT	33.600	50.0 BOX	1,755.60
Total for GENERAL SITE COSTS :				2,382.60

At Cost Materials

Material Name	Material Use	Quantity/Amount	Total Charge
PPE	PERSONAL PROT	SET	1,650.00
SAMPLE BOTTLES	SOIL SAMPLING	BOX	1,910.26
SITE SUPPLIES	ADMIN/H&S	LOT	2,090.00
Total for GENERAL SITE COSTS :			5,650.26

Detailed Report By Task Code (cont.)
Initial Cost Projection Scenario: OFF-SITE DISPOSAL

Projection ID Number: CONT.CHE
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

Subcontractors

Subcontractor	Service	Billing	Total Charge
MICHIGAN ELECTRIC	ELECTRIC SERVICE	1.0 ONCE	261.25
PORT-O-LETS INC	PORT BATHROOM REN	1.0 MONTHS	104.50
MICH BELL	PHONE HOOK-UP	1.0 LOT	313.50
OFFICE MACHINE RENTAL	COMPUTER/PRINT RT	1.0 ONCE	522.50
OFFICE MACHINE RENTAL	FAX AND COPIER	1.0 ONCE	313.50
LOCAL WATER COMPANY	WATER FOR DECON	1.0 ONCE	104.50
CITY DUMP	GARBAGE DISPOSAL	2.0 ROLL-OFF	209.00
GAS-R-US	FUEL FOR VECHILES	1.0 ONCE	522.50
LAB LOCAL ONE	ANALYTICAL	1.0 ONCE	1,045.00
CULIGAN MAN	DRINKING WATER	1.0 ONCE	104.50
MICHIGAN BELL	PHONE SERVICE	1.0 MONTH	522.50
SUPPLY/SELL ALL	REPLACEMENT WOOD	1.0 ONCE	10,450.00
Total for GENERAL SITE COSTS :			14,473.25

Waste Transportation

Waste Type	Amount	Loads	Cost Per Mile	Miles	Total Charge
CONT. WATER	1000 GAL	2	4.00	175	1,463.00
LIN SOIL + WOOD	90 CU YDS	6	4.00	50	1,254.00
NON-HAZ	40 CU YD	2	4.00	50	418.00
PPE/METAL DEBRI	20 CU YDS	1	4.00	50	209.00
Total for GENERAL SITE COSTS :					3,344.00

Waste Disposal

Waste Type	Disposal Method	Units	No. of Units	Unit Cost	Total Charge
DECON WATER	OFF-SITE	GAL	1000	4.00	4,180.00
LIN SOIL + WOOD	LAND FILL	CU YDS	90	200.00	18,810.00
NON-HAZ DEBRIS	OFF-SITE	CU.YDS	40	10.00	418.00
PPE/METAL DEBRI	LANDFILL	CUYDS	20	50.00	1,045.00
Total for GENERAL SITE COSTS :					24,453.00

Federal and State Agencies

0.00

0 % Extramural Contingency:

0.00

TAT Personnel

Level	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
PL2	0	0.00	35.00	0.00	0.00	0.00

Detailed Report By Task Code (cont.)
 Initial Cost Projection Scenario: OFF-SITE DISPOSAL

Projection ID Number: CONT.CHE
 Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
 TAT Contractor: NO TAT COSTS

TAT Personnel

Level	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
TAT Special Projects						0.00
TAT Analytical Services						0.00
Other Costs						0.00
0 % Project Contingency:						0.00

EPA Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
NO EPA COSTS	12	12.00	30.00	4,320.00	0.00	0.00

EPA Headquarters Cost: 763.20
 (10 % of Regional hours)

EPA Indirect Cost: 4,320.00
 (144 hours @ \$30.00 per hour)

EPA Non-Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
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Total category cost: 113,259.13

Total site cost: 113,259.13

Summary Report

Initial Cost Projection Scenario: OFF-SITE DISP-48CYDS

Projection ID Number: 1/2AREA

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Cost Projection Summary

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Contractor Personnel	20,044.87
Contractor Equipment	16,711.69
Unit Rate Materials	1,366.86
At Cost Materials	4,577.76
Subcontractors	8,516.75
Waste Transportation	2,717.00
Waste Disposal	17,660.50

Cleanup Contractor Subtotal	71,595.43
Federal and State Agencies	0.00

Extramural Subtotal	71,595.43
0 % Extramural Contingency	0.00

Extramural Subtotal	71,595.43
TAT Personnel	0.00
TAT Special Projects	0.00
TAT Analytical Services	0.00

Total TAT Costs	0.00
Other Cost Items	0.00

Extramural Subtotal	71,595.43
0 % Project Contingency	0.00

Total Extramural Cost	71,595.43
EPA Regional Personnel	0.00
EPA Non-Regional Personnel	0.00
EPA Headquarters Direct	0.00
(10 % of Regional Hours)	
EPA Indirect	0.00

EPA Total	0.00

Project Total	71,595.43

Initial Cost Projection Scenario: OFF-SITE DISP-48CYDS

Projection ID Number: 1/2AREA

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Project Scope

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Number	Step/Milestone	Estimated Duration	Cost
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000	GENERAL SITE COSTS	7 Days	71,595.43

			71,595.43

Detailed Report By Category
Initial Cost Projection Scenario: OFF-SITE DISP-48CYDS

Projection ID Number: 1/2AREA
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

Cost Projection Detail - By Category

Contractor Personnel

Job Category	Number of Employees	Number of Days	Hrs per Day	Labor	PD, Lodge Travel	Total Charge
000 - GENERAL SITE COSTS						
S105-Response Manager	1	7	12.00	4,046.28	1,143.23	5,189.51
S205-Equipment Operato	1	7	12.00	3,221.96	1,143.23	4,365.19
S210-Field Clerk/Typis	1	7	12.00	2,184.56	1,143.23	3,327.79
S215-Laborer	2	7	12.00	4,875.92	2,286.46	7,162.38
Total for GENERAL SITE COSTS :						20,044.87
Total personnel cost:						20,044.87

Contractor Equipment

Equipment Name	Number Needed	Reg Days	Hours /day	Stby Days	Mob/Demob Days	Decon Days	Mileage	Total Charge
000 - GENERAL SITE COSTS								
10910-Car-Passenger	1	7	12.00	0	0	0	N/A	340.30
15430-Van-Passenger	1	7	12.00	0	0	0	N/A	382.57
22020-Decon-8x25	1	7	12.00	0	2	0	N/A	252.29
25540-Office-8x40	1	7	12.00	0	2	0	N/A	859.66
36070-Loader/Wheel-CAT 966	2	7	12.00	0	2	1	N/A	11,317.94
75140-Generator-50 KW	1	7	12.00	0	0	0	N/A	882.29
76710-Lighting-Conventiona	1	7	12.00	0	0	0	N/A	235.44
78510-Scales-	1	2	12.00	0	2	0	N/A	50.45
79611-Water Laser-HI-Press	1	2	12.00	0	2	0	N/A	2,390.75
Total for GENERAL SITE COSTS :								16,711.69
Total equipment cost:								16,711.69

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge
000 - GENERAL SITE COSTS				
EPOXY PAINT	SEALANT	6.000	50.0 GAL	313.50
GMC-H CARTRIDGES	BREATHING PROT	33.600	30.0 BOX	1,053.36
Total for GENERAL SITE COSTS :				1,366.86

Detailed Report By Category (cont.)
 Initial Cost Projection Scenario: OFF-SITE DISP-48CYDS

Projection ID Number: 1/2AREA
 Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
 TAT Contractor: NO TAT COSTS

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge

Total unit rate materials cost:				1,366.86

At Cost Materials

Material Name	Material Use	Quantity/Amount	Total Charge

000 - GENERAL SITE COSTS			

PPE	PERSONAL PROT	SET	1,100.00
SAMPLE BOTTLES	SOIL SAMPLING	BOX	1,910.26
SITE SUPPLIES	ADMIN/H&S	LOT	1,567.50

Total for GENERAL SITE COSTS :			4,577.76

Total at cost materials cost:			4,577.76

Subcontractors

Subcontractor	Service	Billing	Total Charge

000 - GENERAL SITE COSTS			

MICHIGAN ELECTRIC	ELECTRIC SERVICE	1.0 ONCE	261.25
PORT-O-LETS INC	PORT BATHROOM REN	1.0 ONCES	52.25
MICH BELL	PHONE HOOK-UP	1.0 LOT	313.50
OFFICE MACHINE RENTAL	COMPUTER/PRINT RT	1.0 ONCE	313.50
OFFICE MACHINE RENTAL	FAX AND COPIER	1.0 ONCE	313.50
LOCAL WATER COMPANY	WATER FOR DECON	1.0 ONCE	104.50
CITY DUMP	GARBAGE DISPOSAL	2.0 ROLL-OFF	209.00
GAS-R-US	FUEL FOR VECHILES	1.0 ONCE	261.25
LAB LOCAL ONE	ANALYTICAL	1.0 ONCE	1,045.00
CULIGAN MAN	DRINKING WATER	1.0 ONCE	104.50
MICHIGAN BELL	PHONE SERVICE	1.0 ONCE	313.50
SUPPLY/SELL ALL	REPLACEMENT WOOD	1.0 ONCE	5,225.00

Total for GENERAL SITE COSTS :			8,516.75

Total subcontractor cost:			8,516.75

Detailed Report By Category (cont.)
 Initial Cost Projection Scenario: OFF-SITE DISP-48CYDS

Projection ID Number: 1/2AREA
 Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
 TAT Contractor: NO TAT COSTS

Waste Transportation

Waste Type	Amount	Loads	Cost Per Mile	Miles	Total Charge
000 - GENERAL SITE COSTS					
CONT. WATER	1000 GAL	2	4.00	175	1,463.00
LIN SOIL + WOOD	45 CU YDS	3	4.00	50	627.00
NON-HAZ	40 CU YD	2	4.00	50	418.00
PPE/METAL DEBRI	20 CU YDS	1	4.00	50	209.00
Total for GENERAL SITE COSTS :					2,717.00
Total transportation cost:					2,717.00

Waste Disposal

Waste Type	Disposal Method	Units	No. of Units	Unit Cost	Total Charge
000 - GENERAL SITE COSTS					
DECON WATER	OFF-SITE	GAL	500	4.00	2,090.00
LIN SOIL + WOOD	LAND FILL	CU YDS	45	300.00	14,107.50
NON-HAZ DEBRIS	OFF-SITE	CU.YDS	40	10.00	418.00
PPE/METAL DEBRI	LANDFILL	CUYDS	20	50.00	1,045.00
Total for GENERAL SITE COSTS :					17,660.50
Total disposal cost:					17,660.50

Federal and State Agencies

0.00

0 % Extramural Contingency:

0.00

TAT Personnel

Level	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
000 - GENERAL SITE COSTS						
PL2	7	12.00	35.00	6,644.40	0.00	0.00

TAT Special Projects

0.00

TAT Analytical Services

0.00

Detailed Report By Category (cont.)
 Initial Cost Projection Scenario: OFF-SITE DISP-48CYDS

Projection ID Number: 1/2AREA

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Other Costs 0.00

0 % Project Contingency: 0.00

EPA Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge

000 - GENERAL SITE COSTS						

NO EPA COSTS	0	0.00	0.00	0.00	0.00	0.00

EPA Non-Regional Personnel 0.00

Total site cost: 71,595.43

Detailed Report By Task Code
Initial Cost Projection Scenario: OFF-SITE DISP-48CYDS

Projection ID Number: 1/2AREA

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Cost Projection Detail - By Task Code

000 - GENERAL SITE COSTS

Contractor Personnel

Job Category	Number of Employees	Number of Days	Hrs per Day	Labor	PD, Lodge Travel	Total Charge
S105-Response Manager	1	7	12.00	4,046.28	1,143.23	5,189.51
S205-Equipment Operato	1	7	12.00	3,221.96	1,143.23	4,365.19
S210-Field Clerk/Typis	1	7	12.00	2,184.56	1,143.23	3,327.79
S215-Laborer	2	7	12.00	4,875.92	2,286.46	7,162.38
Total for GENERAL SITE COSTS :						20,044.87

Contractor Equipment

Equipment Name	Number Needed	Reg Days	Hours /day	Stby Days	Mob/Demob Days	Decon Days	Mileage	Total Charge
10910-Car-Passenger	1	7	12.00	0	0	0	N/A	340.30
15430-Van-Passenger	1	7	12.00	0	0	0	N/A	382.57
22020-Decon-8x25	1	7	12.00	0	2	0	N/A	252.29
25540-Office-8x40	1	7	12.00	0	2	0	N/A	859.66
36070-Loader/Wheel-CAT 966	2	7	12.00	0	2	1	N/A	11,317.94
75140-Generator-50 KW	1	7	12.00	0	0	0	N/A	882.29
76710-Lighting-Conventiona	1	7	12.00	0	0	0	N/A	235.44
78510-Scales-	1	2	12.00	0	2	0	N/A	50.45
79611-Water Laser-HI-Press	1	2	12.00	0	2	0	N/A	2,390.75
Total for GENERAL SITE COSTS :								16,711.69

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge
EPOXY PAINT	SEALANT	6.000	50.0 GAL	313.50
GMC-H CARTRIDGES	BREATHING PROT	33.600	30.0 BOX	1,053.36
Total for GENERAL SITE COSTS :				1,366.86

At Cost Materials

Material Name	Material Use	Quantity/Amount	Total Charge
PPE	PERSONAL PROT	SET	1,100.00
SAMPLE BOTTLES	SOIL SAMPLING	BOX	1,910.26
SITE SUPPLIES	ADMIN/H&S	LOT	1,567.50
Total for GENERAL SITE COSTS :			4,577.76

Detailed Report By Task Code (cont.)
Initial Cost Projection Scenario: OFF-SITE DISP-48CYDS

Projection ID Number: 1/2AREA

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Subcontractors

Subcontractor	Service	Billing	Total Charge
MICHIGAN ELECTRIC	ELECTRIC SERVICE	1.0 ONCE	261.25
PORT-O-LETS INC	PORT BATHROOM REN	1.0 ONCES	52.25
MICH BELL	PHONE HOOK-UP	1.0 LOT	313.50
OFFICE MACHINE RENTAL	COMPUTER/PRINT RT	1.0 ONCE	313.50
OFFICE MACHINE RENTAL	FAX AND COPIER	1.0 ONCE	313.50
LOCAL WATER COMPANY	WATER FOR DECON	1.0 ONCE	104.50
CITY DUMP	GARBAGE DISPOSAL	2.0 ROLL-OFF	209.00
GAS-R-US	FUEL FOR VECHILES	1.0 ONCE	261.25
LAB LOCAL ONE	ANALYTICAL	1.0 ONCE	1,045.00
CULIGAN MAN	DRINKING WATER	1.0 ONCE	104.50
MICHIGAN BELL	PHONE SERVICE	1.0 ONCE	313.50
SUPPLY/SELL ALL	REPLACEMENT WOOD	1.0 ONCE	5,225.00
Total for GENERAL SITE COSTS :			8,516.75

Waste Transportation

Waste Type	Amount	Loads	Cost Per Mile	Miles	Total Charge
CONT. WATER	1000 GAL	2	4.00	175	1,463.00
LIN SOIL + WOOD	45 CU YDS	3	4.00	50	627.00
NON-HAZ	40 CU YD	2	4.00	50	418.00
PPE/METAL DEBRI	20 CU YDS	1	4.00	50	209.00
Total for GENERAL SITE COSTS :					2,717.00

Waste Disposal

Waste Type	Disposal Method	Units	No. of Units	Unit Cost	Total Charge
DECON WATER	OFF-SITE	GAL	500	4.00	2,090.00
LIN SOIL + WOOD	LAND FILL	CU YDS	45	300.00	14,107.50
NON-HAZ DEBRIS	OFF-SITE	CU.YDS	40	10.00	418.00
PPE/METAL DEBRI	LANDFILL	CUYDS	20	50.00	1,045.00
Total for GENERAL SITE COSTS :					17,660.50

Federal and State Agencies

0.00

0 % Extramural Contingency:

0.00

TAT Personnel

Level	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
PL2	7	12.00	35.00	6,644.40	0.00	0.00

Detailed Report By Task Code (cont.)
 Initial Cost Projection Scenario: OFF-SITE DISP-48CYDS

Projection ID Number: 1/2AREA
 Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
 TAT Contractor: NO TAT COSTS

TAT Personnel

Level	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
TAT Special Projects						0.00
TAT Analytical Services						0.00
Other Costs						0.00
0 % Project Contingency:						0.00

EPA Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
NO EPA COSTS	0	0.00	0.00	0.00	0.00	0.00

EPA Non-Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
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Total category cost: 71,595.43
 Total site cost: 71,595.43

Summary Report

Initial Cost Projection Scenario: OFF-SITE DISP-31CYDS

Projection ID Number: 1/3AREA

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Cost Projection Summary

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Contractor Personnel	9,586.96
Contractor Equipment	7,630.74
Unit Rate Materials	746.13
At Cost Materials	2,535.50
Subcontractors	4,389.00
Waste Transportation	1,776.50
Waste Disposal	12,853.50

Cleanup Contractor Subtotal	39,518.33
Federal and State Agencies	0.00

Extramural Subtotal	39,518.33
20 % Extramural Contingency	7,903.67

Extramural Subtotal	47,422.00
TAT Personnel	0.00
TAT Special Projects	0.00
TAT Analytical Services	0.00

Total TAT Costs	0.00
Other Cost Items	0.00

Extramural Subtotal	47,422.00
15 % Project Contingency	7,113.30

Total Extramural Cost	54,535.30
EPA Regional Personnel	0.00
EPA Non-Regional Personnel	0.00
EPA Headquarters Direct	0.00
(10 % of Regional Hours)	
EPA Indirect	0.00

EPA Total	0.00

Project Total	54,535.30

Initial Cost Projection Scenario: OFF-SITE DISP-31CYDS

Projection ID Number: 1/3AREA

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

Project Scope

=====

Number	Step/Milestone	Estimated Duration	Cost
000	GENERAL SITE COSTS	4 Days	54,535.30
			54,535.30

Detailed Report By Category
Initial Cost Projection Scenario: OFF-SITE DISP-31CYDS

Projection ID Number: 1/3AREA
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

Cost Projection Detail - By Category

Contractor Personnel

Job Category	Number of Employees	Number of Days	Hrs per Day	Labor	PD, Lodge Travel	Total Charge
000 - GENERAL SITE COSTS						
S105-Response Manager	1	4	12.00	2,312.16	698.06	3,010.22
S205-Equipment Operato	1	4	12.00	1,841.12	698.06	2,539.18
S210-Field Clerk/Typis	1	4	12.00	1,248.32	698.06	1,946.38
S215-Laborer	1	4	12.00	1,393.12	698.06	2,091.18
Total for GENERAL SITE COSTS :						9,586.96
Total personnel cost:						9,586.96

Contractor Equipment

Equipment Name	Number Needed	Reg Days	Hours /day	Stby Days	Mob/Demob Days	Decon Days	Mileage	Total Charge
000 - GENERAL SITE COSTS								
10910-Car-Passenger	1	4	12.00	0	0	0	N/A	272.24
15430-Van-Passenger	1	4	12.00	0	0	0	N/A	306.06
22020-Decon-8x25	1	4	12.00	0	2	0	N/A	180.21
36070-Loader/Wheel-CAT 966	1	4	12.00	0	2	1	N/A	3,536.85
75140-Generator-50 KW	1	4	12.00	0	0	0	N/A	705.83
76710-Lighting-Conventiona	1	4	12.00	0	0	0	N/A	188.35
78510-Scales-	1	2	12.00	0	2	0	N/A	50.45
79611-Water Laser-HI-Press	1	2	12.00	0	2	0	N/A	2,390.75
Total for GENERAL SITE COSTS :								7,630.74
Total equipment cost:								7,630.74

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge
000 - GENERAL SITE COSTS				
EPOXY PAINT	SEALANT	6.000	35.0 GAL	219.45
GMC-H CARTRIDGES	BREATHING PROT	33.600	15.0 BOX	526.68
Total for GENERAL SITE COSTS :				746.13

Detailed Report By Category (cont.)
Initial Cost Projection Scenario: OFF-SITE DISP-31CYDS

Projection ID Number: 1/3AREA
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge

Total unit rate materials cost:				746.13

At Cost Materials

Material Name	Material Use	Quantity/Amount	Total Charge

000 - GENERAL SITE COSTS			

PPE	PERSONAL PROT	SET	550.00
SAMPLE BOTTLES	SOIL SAMPLING	BOX	940.50
SITE SUPPLIES	ADMIN/H&S	LOT	1,045.00

Total for GENERAL SITE COSTS :			2,535.50

Total at cost materials cost:			2,535.50

Subcontractors

Subcontractor	Service	Billing	Total Charge

000 - GENERAL SITE COSTS			

MICHIGAN ELECTRIC	ELECTRIC SERVICE	1.0 ONCE	261.25
PORT-O-LETS INC	PORT BATHROOM REN	1.0 ONCES	52.25
LOCAL WATER COMPANY	WATER FOR DECON	1.0 ONCE	104.50
CITY DUMP	GARBAGE DISPOSAL	1.0 ROLL-OFF	104.50
GAS-R-US	FUEL FOR VECHILES	1.0 ONCE	104.50
LAB LOCAL ONE	ANALYTICAL	1.0 ONCE	522.50
CULIGAN MAN	DRINKING WATER	1.0 ONCE	104.50
SUPPLY/SELL ALL	REPLACEMENT WOOD	1.0 ONCE	3,135.00

Total for GENERAL SITE COSTS :			4,389.00

Total subcontractor cost:			4,389.00

Waste Transportation

Waste Type	Amount	Loads	Cost Per Mile	Miles	Total Charge

000 - GENERAL SITE COSTS					

CONT. WATER	500 GAL	1	4.00	175	731.50

Detailed Report By Category (cont.)
 Initial Cost Projection Scenario: OFF-SITE DISP-31CYDS

Projection ID Number: 1/3AREA
 Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
 TAT Contractor: NO TAT COSTS

Waste Transportation

Waste Type	Amount	Loads	Cost Per Mile	Miles	Total Charge
LIN SOIL + WOOD	30 CU YDS	2	4.00	50	418.00
NON-HAZ	30 CU YD	2	4.00	50	418.00
PPE/METAL DEBRI	20 CU YDS	1	4.00	50	209.00
Total for GENERAL SITE COSTS :					1,776.50

Total transportation cost: 1,776.50

Waste Disposal

Waste Type	Disposal Method	Units	No. of Units	Unit Cost	Total Charge
000 - GENERAL SITE COSTS					
DECON WATER	OFF-SITE	GAL	500	4.00	2,090.00
LIN SOIL + WOOD	LAND FILL	CU YDS	30	300.00	9,405.00
NON-HAZ DEBRIS	OFF-SITE	CU.YDS	30	10.00	313.50
PPE/METAL DEBRI	LANDFILL	CUYDS	20	50.00	1,045.00
Total for GENERAL SITE COSTS :					12,853.50

Total disposal cost: 12,853.50

Federal and State Agencies

0.00

20 % Extramural Contingency: 7,903.67

TAT Personnel

Level	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
000 - GENERAL SITE COSTS						
PL2	0	0.00	35.00	0.00	0.00	0.00

TAT Special Projects

0.00

TAT Analytical Services

0.00

Other Costs

0.00

15 % Project Contingency: 7,113.30

Detailed Report By Category (cont.)
 Initial Cost Projection Scenario: OFF-SITE DISP-31CYDS

Projection ID Number: 1/3AREA

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

EPA Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge

000 - GENERAL SITE COSTS						

NO EPA COSTS	0	0.00	30.00	0.00	0.00	0.00

EPA Non-Regional Personnel

0.00

Total site cost: 54,535.30

Detailed Report By Task Code
Initial Cost Projection Scenario: OFF-SITE DISP-31CYDS

Projection ID Number: 1/3AREA
Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
TAT Contractor: NO TAT COSTS

Cost Projection Detail - By Task Code

000 - GENERAL SITE COSTS

Contractor Personnel

Job Category	Number of Employees	Number of Days	Hrs per Day	Labor	PD, Lodge Travel	Total Charge
S105-Response Manager	1	4	12.00	2,312.16	698.06	3,010.22
S205-Equipment Operato	1	4	12.00	1,841.12	698.06	2,539.18
S210-Field Clerk/Typis	1	4	12.00	1,248.32	698.06	1,946.38
S215-Laborer	1	4	12.00	1,393.12	698.06	2,091.18
Total for GENERAL SITE COSTS :						9,586.96

Contractor Equipment

Equipment Name	Number Needed	Reg Days	Hours /day	Stby Days	Mob/Demob Days	Decon Days	Mileage	Total Charge
10910-Car-Passenger	1	4	12.00	0	0	0	N/A	272.24
15430-Van-Passenger	1	4	12.00	0	0	0	N/A	306.06
22020-Decon-8x25	1	4	12.00	0	2	0	N/A	180.21
36070-Loader/Wheel-CAT 966	1	4	12.00	0	2	1	N/A	3,536.85
75140-Generator-50 KW	1	4	12.00	0	0	0	N/A	705.83
76710-Lighting-Conventiona	1	4	12.00	0	0	0	N/A	188.35
78510-Scales-	1	2	12.00	0	2	0	N/A	50.45
79611-Water Laser-HI-Press	1	2	12.00	0	2	0	N/A	2,390.75
Total for GENERAL SITE COSTS :								7,630.74

Unit Rate Materials

Material Name	Material Use	Unit Cost	Number of Units	Total Charge
EPOXY PAINT	SEALANT	6.000	35.0 GAL	219.45
GMC-H CARTRIDGES	BREATHING PROT	33.600	15.0 BOX	526.68
Total for GENERAL SITE COSTS :				746.13

At Cost Materials

Material Name	Material Use	Quantity/Amount	Total Charge
PPE	PERSONAL PROT	SET	550.00
SAMPLE BOTTLES	SOIL SAMPLING	BOX	940.50
SITE SUPPLIES	ADMIN/H&S	LOT	1,045.00
Total for GENERAL SITE COSTS :			2,535.50

Detailed Report By Task Code (cont.)
 Initial Cost Projection Scenario: OFF-SITE DISP-31CYDS

Projection ID Number: 1/3AREA
 Cleanup Contractor: RES5 - Riedel Environmental

Date: 10/20/93
 TAT Contractor: NO TAT COSTS

Subcontractors

Subcontractor	Service	Billing	Total Charge
MICHIGAN ELECTRIC	ELECTRIC SERVICE	1.0 ONCE	261.25
PORT-O-LETS INC	PORT BATHROOM REN	1.0 ONCES	52.25
LOCAL WATER COMPANY	WATER FOR DECON	1.0 ONCE	104.50
CITY DUMP	GARBAGE DISPOSAL	1.0 ROLL-OFF	104.50
GAS-R-US	FUEL FOR VECHILES	1.0 ONCE	104.50
LAB LOCAL ONE	ANALYTICAL	1.0 ONCE	522.50
CULIGAN MAN	DRINKING WATER	1.0 ONCE	104.50
SUPPLY/SELL ALL	REPLACEMENT WOOD	1.0 ONCE	3,135.00
Total for GENERAL SITE COSTS :			4,389.00

Waste Transportation

Waste Type	Amount	Loads	Cost Per Mile	Miles	Total Charge
CONT. WATER	500 GAL	1	4.00	175	731.50
LIN SOIL + WOOD	30 CU YDS	2	4.00	50	418.00
NON-HAZ	30 CU YD	2	4.00	50	418.00
PPE/METAL DEBRI	20 CU YDS	1	4.00	50	209.00
Total for GENERAL SITE COSTS :					1,776.50

Waste Disposal

Waste Type	Disposal Method	Units	No. of Units	Unit Cost	Total Charge
DECON WATER	OFF-SITE	GAL	500	4.00	2,090.00
LIN SOIL + WOOD	LAND FILL	CU YDS	30	300.00	9,405.00
NON-HAZ DEBRIS	OFF-SITE	CU.YDS	30	10.00	313.50
PPE/METAL DEBRI	LANDFILL	CUYDS	20	50.00	1,045.00
Total for GENERAL SITE COSTS :					12,853.50

Federal and State Agencies

0.00

20 % Extramural Contingency: 7,903.67

TAT Personnel

Level	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
PL2	0	0.00	35.00	0.00	0.00	0.00

Detailed Report By Task Code (cont.)
 Initial Cost Projection Scenario: OFF-SITE DISP-31CYDS

Projection ID Number: 1/3AREA

Date: 10/20/93

Cleanup Contractor: RES5 - Riedel Environmental

TAT Contractor: NO TAT COSTS

TAT Special Projects	0.00
TAT Analytical Services	0.00
Other Costs	0.00

15 % Project Contingency: 7,113.30

EPA Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge
NO EPA COSTS	0	0.00	30.00	0.00	0.00	0.00

EPA Non-Regional Personnel

Title	Number of Days	Hrs per Day	Hourly Rate	Labor	PD, Lodge Travel	Total Charge

Total category cost: 54,535.30

Total site cost: 54,535.30